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Examiner: Theresa T. Snider
Group Art Unit: 1744

Amendments to the Drawings

Please approve for entry the attached drawing Replacement Sheet that includes changes to Figure 3. The sheet is marked as “Replacement Sheet” and replaces the original sheet. An Annotated Sheet is provided for the Examiner’s benefit.

Attachment: Replacement Sheet
Annotated Sheet

Remarks/Arguments

By the present amendment, the specification has been amended to correct a clerical mistake and Fig. 3 of the drawings has been amended to correct a numbering error. The attached drawing sheets include a Replacement Sheet and an Annotated Sheet made in accordance with objections raised by the Examiner, as is explained more fully below.

Claims 1-21 were pending in the application. By the present amendment, claims 1 and 3-20 are amended, claims 2 and 21 have been cancelled without prejudice and new claims 22-26 are added.

Applicants believe the amendments made herein add no new matter. Any amendments to the claims which have been made in this amendment, and which have not been specifically noted to overcome a rejection based on prior art, should be considered to have been made for a purpose unrelated to patentability, and no estoppel should be deemed to be attached thereto.

Reconsideration and reexamination of the application is respectfully requested in view of the amendments and the following remarks.

Election/Restrictions

In the Office Action, restriction was required under 35 U.S.C § 121 between:

- Group I – Claims 1-20, drawn to a cleaning robot, and;
- Group II – Claim 21, drawn to a method of cleaning a surface.

Responsive to the restriction requirement, Applicants elect, with traverse, Group I, claims 1-20, drawn to an apparatus for automatically forming components. Applicants have cancelled, without prejudice, the claim of Group II by the above amendment.

Objections to the Drawings

The drawings are objected to by the Examiner because Fig. 3 has two reference numerals “60” and two reference numerals “62” directed to different elements. Applicants have amended Fig. 3 to remove one “60” and one “62” directed to incorrect elements, leaving one “60” properly directed to a “working air outlet” and one “62” properly directed to a “working air

inlet”. The attached drawing sheets include a Replacement Sheet and an Annotated Sheet made in accordance with objections raised by the Examiner. Applicants submit that amendments overcome the objection.

Objections to the Specification

The specification is objected to by the Examiner for informalities detailed in the Office Action. Accordingly, paragraph [0021] of the specification has been amended so that the reference numeral “10” correctly follows “robotic extraction cleaner”. Applicants submit that the amendments overcome the objection.

Objections to the Claims

Claim 2-20 are objected to by the Examiner for informalities detailed in the Office Action. Accordingly, claims 3-20 have been amended to begin with “The” instead of “An”. Applicants submit that the amendments overcome the objection.

Claim Rejections – 35 U.S.C. § 112

Claims 9 and 11 stand rejected under 35 U.S.C §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The rejection is respectfully traversed.

Claim 9 has been amended to replace the term “base assembly” with “base housing” and claim 11 has been amended to replace the term “dusting cloth” with “dusting assembly”. Applicants submit that the amendments overcome the rejection and respectfully request that it be withdrawn.

Claim Rejections – 35 U.S.C. § 102

Claims 1-2 and 8-10 stand rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,959,423 to Nakanishi et al. (“Nakanishi”). This rejection is respectfully traversed.

For Nakanishi to anticipate these claims, each and every limitation in the claims must be found in Nakanishi. Since such is not the case, the anticipation rejection must fail.

Claim 1 as amended is directed to an extraction cleaning robot including, among other things, a squeegee adjacent a suction nozzle.

Nakanishi discloses a robot cleaner having a housing, a drive unit, a control unit, and a working unit, which includes a tank, a suction nozzle, and rotating wiping members. The tank houses solution which is distributed onto the floor as necessary. A separate control unit sends signals to a microcomputer in the control unit of the robot to execute commands, such as moving across the floor surface. Nakanishi fails to disclose a squeegee. Therefore, Nakanishi does not anticipate claim 1 and claim 1 is patentable over Nakanishi. Claims 3-20 and 21-26 are also patentable over Nakanishi based on their direct or indirect dependency on claim 1.

Claim Rejections – 35 U.S.C. § 103

Claims 1-2, 8-11 and 19-20 stand rejected under 35 U.S.C §103(a) as being unpatentable over U.S. Patent No. 6,481,515 to Kirkpatrick et al. (“Kirkpatrick”) in view of Nakanishi. This rejection is respectfully traversed.

Kirkpatrick discloses an autonomous mobile surface cleaning apparatus having a housing with collision detection sensors, a control module, and a drive mechanism. The housing has a surface treatment module, which can comprise a cleaning cloth, and additionally a container for storing cleaning fluid that is distributed to the cleaning cloth.

The alleged combination of Kirkpatrick and Nakanishi is traversed. There is no suggestion or motivation to combine the teachings of these two patents. However, even if the alleged combination of Kirkpatrick and Nakanishi could be made, however untenably, it would still not reach applicant’s invention. At best, the alleged combination of Kirkpatrick and Nakanishi would provide the collision detection sensors, a control module, and a drive mechanism of Kirkpatrick in the Nakanishi robot cleaner.

Kirkpatrick does not remedy the shortcomings of Nakanishi with respect to claim 1; namely, Kirkpatrick does not disclose a squeegee as required by claim 1. Moreover, there is no

teaching or suggestion in either Nakanishi or Kirkpatrick of modifying their respective disclosures to include a squeegee. Accordingly, claim 1 is patentable over the alleged combination of Kirkpatrick and Nakanishi. Claims 2, 8-11, and 19-20 depend from claim 1 and define over the alleged combination of Kirkpatrick and Nakanishi for the same reason as claim 1.

Claims 3 and 12 stand rejected under 35 U.S.C §103(a) as being unpatentable over Kirkpatrick in view of Nakanishi, as applied to claim 2 above, and further in view of U.S. Patent Application Publication No. 2004/0031121 to Martin et al. ("Martin"). This rejection is respectfully traversed.

The alleged combination of Kirkpatrick and Nakanishi with Martin is traversed. There is no basis for combining the disclosure of Martin with the Kirkpatrick and Nakanishi references and no basis for combining the Kirkpatrick and Nakanishi references as discussed above. However, even if the alleged combination of Kirkpatrick and Nakanishi with Martin could be made, however untenably, it still would not meet the limitations of claims 3 and 12.

The addition of Martin does not remedy the shortcomings of the underlying alleged combination of Kirkpatrick and Nakanishi with respect to claim 1, from which claims 3 and 12 ultimately depend; namely Martin does not disclose a squeegee as required by claim 1. Claims 3 and 12 depend from claim 1 and define over the alleged combination of Kirkpatrick, Nakanishi and Martin at least in the same manner as claim 1.

Claims 4-7 and 13-16 stand rejected under 35 U.S.C §103(a) as being unpatentable over Kirkpatrick in view of Nakanishi and Martin as applied to claim 3 above, and further in view of U.S. Patent No. 6,446,302 to Kasper et al. ("Kasper"). The rejection is respectfully traversed.

The alleged combination of Kirkpatrick in view of Nakanishi and Martin as applied to claim 3 and Kasper is traversed. The uncombinability of Kirkpatrick in view of Nakanishi and Martin as applied to claim 3 has been discussed above. The Kasper reference likewise is not combinable with Kirkpatrick, Nakanishi and Martin because they relate to different types of floor cleaners.

The addition of Kasper does not remedy the shortcomings of the underlying combination of Kirkpatrick, Nakanishi and Martin with respect to claim 1, from which claims 4-7 and 13-16

ultimately depend; namely Kasper fails to disclose a squeegee as required by claim 1. Accordingly, claims 4-7 and 13-16 depend from claim 1 and define over the alleged combination of Kirkpatrick, Nakanishi, Martin and Kasper in the same manner as claim 1.

Claims 17-18 stand rejected under 35 U.S.C §103(a) as being unpatentable over Kirkpatrick in view of Nakanishi, as applied to claim 1 above, and further in view of Kasper. The rejection is respectfully traversed.

The alleged combination of Kirkpatrick and Nakanishi in view of Kasper is traversed. There is no basis for making the alleged combination of references. There is no suggestion in any of the references that would warrant the combination of these several references. However, even if the alleged combination of Kirkpatrick and Nakanishi in view of Kasper could be made, however untenably, it would not reach Applicants' claimed invention.

As discussed above, the addition of Kasper does not remedy the shortcomings of the underlying combination of Kirkpatrick and Nakanishi with respect to claim 1, from which claims 17-18 ultimately depend. Accordingly, claim 17 and 28 define over the alleged combination of Kirkpatrick and Nakanishi in view of Kasper in the same manner as claim 1, namely, the alleged combination of Kirkpatrick and Nakanishi in view of Kasper does not disclose a squeegee in the claimed combination of claim 1. Thus, claims 17-18 are also patentable over the combination based on their direct or indirect dependency on claim 1.

Claims 17-18 stand rejected under 35 U.S.C §103(a) as being unpatentable over Nakanishi, as applied to claim 1 above, and further in view of Kasper. The rejection is respectfully traversed.

The alleged combination of Nakanishi and Kasper is traversed. There is no basis for making the alleged combination. There is no suggestion in any of the references that would suggest the alleged combination of these references. However, even if the alleged combination of Nakanishi and Kasper were to be made, however untenably, it would still not meet the inventions of claims 17 and 18. At best, the alleged combination of Nakanishi and Kasper would add Kasper's floor sensing elements to the Nakanishi autonomous floor cleaner.

As discussed above, Kasper does not remedy the shortcomings of Nakanishi with respect to claim 1, from which claims 17-18 ultimately depend. Accordingly, claims 17 and 18 define over the alleged combination of Nakanishi and Kasper in the same manner as claim 1; namely, the alleged combination of Nakanishi and Kasper does not disclose a squeegee in the claimed combination of claim 1. Thus, claims 17-18 are dependent on claim 1 and define over the alleged combination of Nakanishi and Kasper in the same manner as claim 1.

Claims 19-20 stand rejected under 35 U.S.C §103(a) as being unpatentable over Nakanishi, as applied to claim 1 above, and further in view of U.S. Patent No. 5,109,566 to Kobayashi et al. ("Kobayashi"). The rejection is respectfully traversed.

The alleged combination of Nakanishi and Kobayashi is traversed. There is no basis for making the alleged combination. There is no suggestion in any of these references that would warrant the alleged combination of these two references. However, even if the alleged combination of Nakanishi and Kobayashi were to be made, however untenably, it would still not meet the inventions of claims 19 and 20. At best, the alleged combination of Nakanishi and Kasper would add the Kobayashi distance sensors and collision sensing bumpers to the Nakanishi autonomous floor cleaner.

The addition of Kobayashi does not remedy the shortcomings of Nakanishi with respect to claim 1; namely, Kobayashi does not disclose a squeegee as required by claim 1, from which claims 19-20 ultimately depend. Accordingly, claims 19-20 define over the alleged combination of Nakanishi and Kobayashi in the same manner as claim 1.

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In view of the foregoing remarks and amendments, it is submitted that all of the claims are in condition for allowance. Early notification of allowability is respectfully requested.

Respectfully submitted,

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